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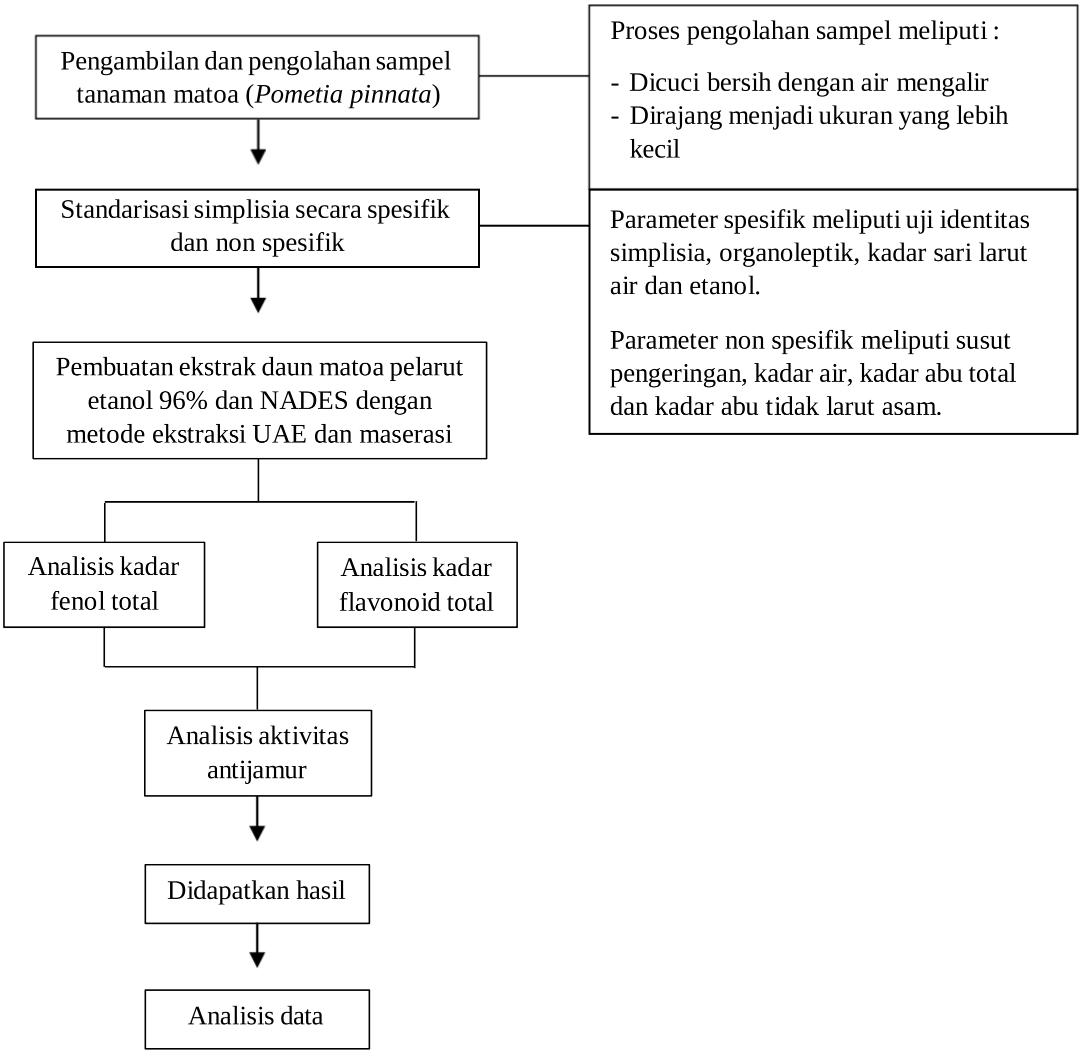
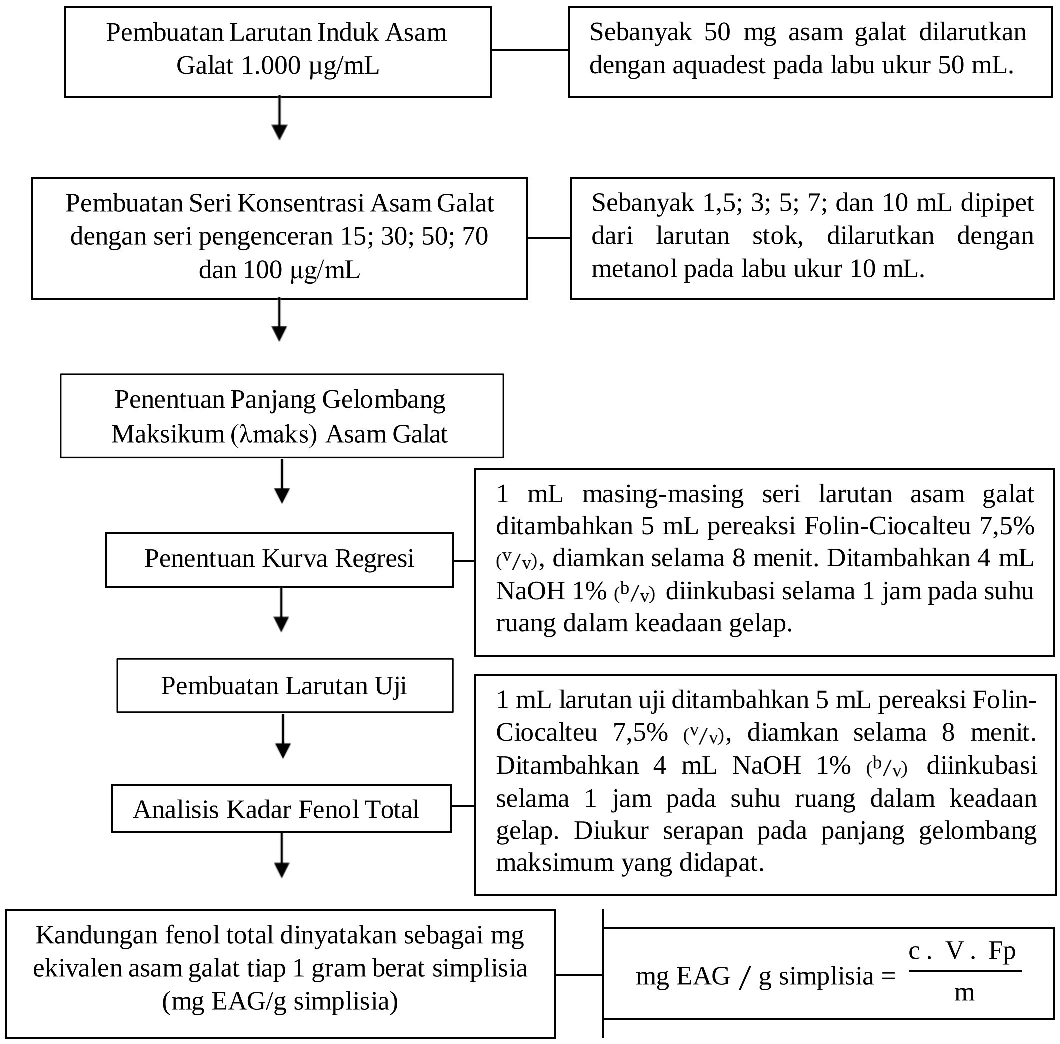
LAMPIRAN

Lampiran 1. Skema Alur Penelitian



Lampiran 2. Skema Kerja Analisis Kadar Fenol Total



Lampiran 3. Skema Kerja Analisis Kadar Flavonoid Total

Pembuatan Larutan Induk Kuersetin 1.000 µg/mL

Sebanyak 50 mg kuersetin dilarutkan dengan aquadest pada labu ukur 50 mL.

↓

Pembuatan Seri Konsentrasi Kuersetin dengan seri pengenceran 12,5; 25; 50; 75 dan 100 µg/mL

Sebanyak 1,25; 2,5; 5; 7,5; dan 10 mL dipipet dari larutan stok, dilarutkan dengan etanol pada labu ukur 10 mL.

↓

Penentuan Panjang Gelombang Maksikum (λmaks) Kuersetin

↓

Penentuan Kurva Regresi

0,5 mL masing-masing seri larutan kuersetin ditambahkan 1,5 mL etanol, 0,1 mL aluminium klorida 10% ($^b/_v$), 0,1 mL natrium asetat 1M ($^b/_v$) dan 2,8 mL air, dikocok dan diamkan selama 30 menit suhu ruang.

↓

Pembuatan Larutan Uji

↓

Analisis Kadar Flavonoid Total

0,5 mL larutan uji ditambahkan 1,5 mL etanol, 0,1 mL aluminium klorida 10% ($^b/_v$), 0,1 mL natrium asetat 1M ($^b/_v$) dan 2,8 mL air, dikocok dan diamkan selama 30 menit suhu ruang.

↓

Kandungan fenol total dinyatakan sebagai mg ekivalen kuersetin tiap 1 gram berat simplisia (mg EK/g simplisia)

$$\text{mg EK / g simplisia} = \frac{c \,.\, V \,.\, Fp}{m}$$

Lampiran 4. Skema Kerja Analisis Aktivitas Antijamur

Preparasi

Persiapan Kontrol Positif dan Kontrol Negatif

Sterilisasi Alat

Pembuatan Media SDA dan SDB

Peremajaan Biakan Jamur

Pembuatan Larutan Mc. Farland 0,5

Pembuatan Kontrol DMSO

Pembuatan Suspensi Jamur

Analisis Aktivitas Antijamur

Analisis Daya Hambat Aktivitas Antijamur

Sebanyak 15 mL media SDA dimasukkan kedalam cawan petri kemudian diusapkan larutan suspensi *Malassezia furfur* secara merata pada permukaan media yang telah memadat menggunakan *cotton swab* steril, dibiarkan selama 5 menit. Kontrol positif, kontrol negatif dan sampel uji kemudian diletakkan diatas permukaan cawan petri yang berisi suspensi jamur menggunakan pinset steril. Dilakukan pengulangan sebanyak 2 kali. Selanjutnya cawan petri diinkubasi kedalam inkubator selama 3-5 hari pada suhu 30-37^{o}C. Aktivitas antijamur didapatkan dengan cara mengukur diameter zona hambat yang terbentuk dengan menggunakan jangka sorong.

Penetapan Nilai KHM Aktivitas Antijamur

Sebanyak 6 cawan petri kecil steril disiapkan untuk percobaan. Masing-masing cawan petri diisi dengan 10 ml media SDA dan 1 ml larutan uji dengan berbagai konsentrasi yang telah dilakukan pengenceran 60x, 45x, 35x, 15x, 14x dan 13x dari larutan uji, dibiarkan hingga media yang berisi larutan uji mengeras. Selanjutnya larutan suspensi *Malassezia furfur* diusapkan secara merata pada permukaan media berisi larutan uji. Selanjutnya cawan petri diinkubasi kedalam inkubator selama 3-5 hari pada suhu 30-37^{o}C. Hasil penetapan nilai KHM dapat dilihat secara visual yang ditandai dengan tingkat kekeruhan dan kejernihan larutan uji.

Lampiran 5. Determinasi Tanaman Matoa

HERBARIUM UNIVERSITAS ANDALAS (ANDA)

Departemen Biologi FMIPA Universitas Andalas Kampus Limau Manih Padang
Sumbar Indonesia 25163 Telp. +62-751-777427 e-mail: herbariumanda@yahoo.com

Nomor : 865/K-ID/ANDA/XII/2023
Lampiran : -
Perihal : Hasil Identifikasi

Kepada yth,
Suhaera, M. Pharm. Sci
Di
Tempat

Dengan hormat,
Sehubungan dengan surat permohonan determinasi sampel dari Institut Kesehatan Mitra Bunda tanggal 19 Desember 2023 di Herbarium Universitas Andalas Departemen Biologi FMIPA Universitas Andalas, kami telah membantu mengidentifikasi tumbuhan yang dibawa, dari:

Nama : Suhaera,M. Pharm. Sci
Instansi : Institut Kesehatan Mitra Bunda

Berikut ini diberikan hasil identifikasi yang dikeluarkan dari Herbarium Universitas Andalas.

No	Family	Spesies	Nama Lokal
1.	Sapindaceae	*Pometia pinnata* J.R.Forst. & G.Forst.	Matoa
2.	Pandanaceae	*Pandanus tectorius* Parkinson	Pandan laut

Demikian surat ini dibuat untuk dapat digunakan seperlunya.

Padang, 19 Desember 2023
Kepala,

Dr. Nurainas
NIP. 196908141995122001

Lampiran 6. Sertifikat Jamur *Malasseia furfur*

indinesia
paramartha | Laboratories.

Certificate of Analysis

Product Name: Malassezia fur fur *Strain YPC12214*
Product Code: 12089211
Lot Number: C53651
Expiration Date: 22.08.2024

*Date format is DD.MM.YYYY

Item	Description	CFU/Loop	Microscopy Morphology:
BP LC1	Organism exhibits characteristic biochemical, enzymatic, genotypical and/or biochemical reactions. Automated and/or conventional testing was performed and results were within established limits Antimicrobial testing performed where applicable. Results within expected ranges.	10(3)	No hyphae. Oval cells with conidia produced on a base at one pole

Macroscopic Morphology:

Medium, convex, slightly irregular, light tan, yeast-like in appearance on Dixon's agar at 30C.

Appearance : Preserved Gel Matrix suspended in loop

Abinaya Prasraya
Quality Assurance Manager
PT. Indinesia Paramartha Laboratories

Lampiran 7. Data Nilai Rendemen Ekstrak *Pometia pinnata*

Sampel	Bobot Awal (g)	Bobot Akhir (g)	% Rendemen
Ekstrak Etanol	5	1,07	21,4 %

Perhitungan :

$$\% \text{ Rendemen } = \frac{\text{berat ekstrak kental yang didapat}}{\text{berat sampel yang digunakan}} \text{ x } 100\% = 21{,}4\%$$

$$= \frac{1{,}07}{5} \text{ x } 100\%$$

$$= 21{,}4\%$$

Lampiran 8. Data dan Perhitungan Standarisasi Simplisia *Pometia pinnata*

1) Kadar sari larut air

$$\% \text{ kadar sari larut air} = \frac{a}{b} \times \frac{100}{20} \times 100\%$$

Keterangan :

a = berat sari (g)

b = berat simplisia (g)

Berat Awal (g) a	Berat Akhir (g) b	Kadar (% b/b)
5,011 g	0,176	17,561%

$$\% \text{ kadar sari larut air} = \frac{0{,}176}{5{,}011} \times \frac{100}{20} \times 100 = 17{,}55\%$$

2) Kadar sari larut etanol

$$\% \text{ kadar sari larut etanol} = \frac{a}{b} \times \frac{100}{20} \times 100\%$$

Keterangan :

a = berat sari (g)

b = berat simplisia (g)

Berat Awal (g) a	Berat Akhir (g) b	Kadar (% b/b)
5,012 g	0,26	25,938%

$$\% \text{ kadar sari larut etanol} = \frac{0{,}26}{5{,}012} \times \frac{100}{20} \times 100 = 26\%$$

3) Penetapan susut pengeringan

$$\% \text{ susut pengeringan} = \frac{a - b}{a} \times 100\%$$

Keterangan :

a = berat simplisia (g)

b = berat akhir (g)

Berat Awal (g) a	Berat Akhir (g) b	(% b/b)
2 g	1,835	8,25%

$$\% \text{ susut pengeringan} = \frac{2 - 1{,}835}{2} \times 100 = 8{,}25\%$$

4) Penetapan kadar air

$$\% \text{ kadar air} = \frac{a}{b} \times 100\%$$

Keterangan :

a = berat akhir (g)

b = berat simplisia (g)

Berat Awal (g) **a**	**Berat Akhir (g)** **b**	**(% b/b)**
10 g	0,725	7,25%

$$\% \text{ kadar air} = \frac{0{,}725}{10} \times 100 = 7{,}25\%$$

5) Penetapan kadar abu total

$$\% \text{ kadar abu} = \frac{a}{b} \times 100\%$$

Keterangan :

a = berat abu sisa pijar (g)

b = berat simplisia (g)

Berat Awal (g) **a**	**Berat Akhir (g)** **b**	**(% b/b)**
2 g	0,178	8,9%

$$\% \text{ kadar abu} = \frac{0{,}178}{2} \times 100 = 8{,}9\%$$

6) Penetapan kadar abu tidak larut asam

$$\% \text{ kadar abu} = \frac{a}{b} \times 100\%$$

Keterangan :

a = berat abu sisa pijar (g)

b = berat simplisia (g)

Berat Awal (g) **a**	**Berat Akhir (g)** **b**	**(% b/b)**
2 g	0,044	2,2%

$$\% \text{ kadar abu} = \frac{0{,}044}{2} \times 100 = 2{,}2\%$$

Lampiran 9. Perhitungan Preparasi NADES (Kolin Klorida:Asam Sitrat)

1) Massa ChCl:CAc (1:1)

Mr ChCl = 139,62 g/mol ; Mr CAc = 192,124 g/mol

Total massa yang ditimbang = 50 g

$$n = \frac{\text{massa total}}{(\text{Mr ChCl x 1})+(\text{Mr CAc x 1})}$$

$$n = \frac{50\ \text{g}}{(139{,}62\ \text{g/mol x 1}) + (192{,}124\ \text{g/mol x 1})}$$

$$n = \frac{50}{331{,}744}$$

n = 0,1507 mol

Massa ChCl = (Mr ChCl) x n
= 139,62 g/mol x 0,1507 g/mol
= 21,04 g

Massa CAc = (Mr ChCl) x n
= 192,124 g/mol x 0,1507 g/mol
= 28,953 g

2) Massa ChCl:CAc (2:1)

Mr ChCl = 139,62 g/mol ; Mr CAc = 192,124 g/mol

Total massa yang ditimbang = 50 g

$$n = \frac{\text{massa total}}{(\text{Mr ChCl x 2})+(\text{Mr CAc x 1})}$$

$$n = \frac{50\ \text{g}}{(139{,}62\ \text{g/mol x 2}) + (192{,}124\ \text{g/mol x 1})}$$

$$n = \frac{50}{471{,}364}$$

n = 0,106 mol

Massa ChCl = (Mr ChCl) x n
= 279,24 g/mol x 0,106 g/mol
= 29,599 g

Massa CAc = (Mr ChCl) x n

= 192,124 g/mol x 0,106 g/mol

= 20,365 g

3) Massa ChCl:CAc (1:2)

Mr ChCl = 139,62 g/mol ; Mr CAc = 192,124 g/mol

Total massa yang ditimbang = 50 g

$$n = \frac{\text{massa total}}{(\text{Mr ChCl x 1})+(\text{Mr CAc x 2})}$$

$$n = \frac{50\text{ g}}{(139{,}62\text{ g/mol x 1}) + (192{,}124\text{ g/mol x 2})}$$

$$n = \frac{50}{523{,}868}$$

n = 0,0954 mol

Massa ChCl = (Mr ChCl) x n

= 139,62 g/mol x 0,0954 g/mol

= 13,319 g

Massa CAc = (Mr ChCl) x n

= 384,248 g/mol x 0,0954 g/mol

= 36,657 g

4) Massa ChCl:CAc (5:2)

Mr ChCl = 139,62 g/mol ; Mr CAc = 192,124 g/mol

Total massa yang ditimbang = 50 g

$$n = \frac{\text{massa total}}{(\text{Mr ChCl x 5})+(\text{Mr CAc x 2})}$$

$$n = \frac{50\text{ g}}{(139{,}62\text{ g/mol x 5}) + (192{,}124\text{ g/mol x 2})}$$

$$n = \frac{50}{1.082{,}348}$$

n = 0,0462 mol

Massa ChCl = (Mr ChCl) x n

= 698,1 g/mol x 0,0462 g/mol

= 32,252 g

Massa CAc = (Mr ChCl) x n

= 384,248 g/mol x 0,0462 g/mol

= 17,752 g

5) Massa ChCl:CAc (1:4)

Mr ChCl = 139,62 g/mol ; Mr CAc = 192,124 g/mol

Total massa yang ditimbang = 50 g

$$n = \frac{\text{massa total}}{(\text{Mr ChCl x 1})+(\text{Mr CAc x 4})}$$

$$n = \frac{50 \text{ g}}{(139{,}62 \text{ g/mol x 1}) + (192{,}124 \text{ g/mol x 4})}$$

$$n = \frac{50}{908{,}116}$$

n = 0,055 mol

Massa ChCl = (Mr ChCl) x n

= 139,62 g/mol x 0,055 g/mol

= 7,679 g

Massa CAc = (Mr ChCl) x n

= 768,496 g/mol x 0,055 g/mol

= 42,267 g

6) Massa ChCl:CAc (4:1)

Mr ChCl = 139,62 g/mol ; Mr CAc = 192,124 g/mol

Total massa yang ditimbang = 50 g

$$n = \frac{\text{massa total}}{(\text{Mr ChCl x 4})+(\text{Mr CAc x 1})}$$

$$n = \frac{50 \text{ g}}{(139{,}62 \text{ g/mol x 4}) + (192{,}124 \text{ g/mol x 1})}$$

$$n = \frac{50}{750{,}604}$$

n = 0,067 mol

Massa ChCl = (Mr ChCl) x n

= 558,48 g/mol x 0,067 g/mol

= 37,418 g

Massa CAc = (Mr ChCl) x n

= 192,124 g/mol x 0,067 g/mol

= 12,872 g

Lampiran 10. Perhitungan Pembuatan Larutan Analisis Kadar Fenol Total

1) Asam Galat 1.000 µg/mL $= \frac{50\ \text{mg}}{0{,}05\ \text{L}} = \frac{50.000\ \mu\text{g}}{50\ \text{mL}}$

   Asam Galat 100 µg/mL = $V_1 \times C_1 = V_2 \times C_2$

   $V_1 \times 1.000\ \mu\text{g/mL} = 50\ \text{mL} \times 100\ \mu\text{g/mL}$

   $V_1 = \frac{50\ \text{mL} \times 100\ \cancel{\mu\text{g/mL}}}{1.000\ \cancel{\mu\text{g/mL}}}$

   $V_1 = 5\ \text{mL}$

   Asam Galat 15 µg/mL

   $V_1 \times C_1 = V_2 \times C_2$

   $V_1 \times 100\ \mu\text{g/mL} = 10\ \text{mL} \times 15\ \mu\text{g/mL}$

   $V_1 = \frac{10\ \text{mL} \times 15\ \cancel{\mu\text{g/mL}}}{100\ \cancel{\mu\text{g/mL}}}$

   $V_1 = 1{,}5\ \text{mL}$

   Asam Galat 30 µg/mL

   $V_1 \times C_1 = V_2 \times C_2$

   $V_1 \times 100\ \mu\text{g/mL} = 10\ \text{mL} \times 30\ \mu\text{g/mL}$

   $V_1 = \frac{10\ \text{mL} \times 30\ \cancel{\mu\text{g/mL}}}{100\ \cancel{\mu\text{g/mL}}}$

   $V_1 = 3\ \text{mL}$

   Asam Galat 50 µg/mL

   $V_1 \times C_1 = V_2 \times C_2$

   $V_1 \times 100\ \mu\text{g/mL} = 10\ \text{mL} \times 50\ \mu\text{g/mL}$

   $V_1 = \frac{10\ \text{mL} \times 50\ \cancel{\mu\text{g/mL}}}{100\ \cancel{\mu\text{g/mL}}}$

   $V_1 = 5\ \text{mL}$

   Asam Galat 70 µg/mL

   $V_1 \times C_1 = V_2 \times C_2$

   $V_1 \times 100\ \mu\text{g/mL} = 10\ \text{mL} \times 70\ \mu\text{g/mL}$

   $V_1 = \frac{10\ \text{mL} \times 70\ \cancel{\mu\text{g/mL}}}{100\ \cancel{\mu\text{g/mL}}}$

   $V_1 = 7\ \text{mL}$

   Asam Galat 100 µg/mL

   $V_1 \times C_1 = V_2 \times C_2$

   $V_1 \times 100\ \mu\text{g/mL} = 10\ \text{mL} \times 100\ \mu\text{g/mL}$

   $V_1 = \frac{10\ \text{mL} \times 100\ \cancel{\mu\text{g/mL}}}{}$

   $V_1 = 10\ \text{mL}$

2) Folin-Ciocalteu 7,5% ($^{v}/_{v}$) $= \frac{7{,}5\ \text{mg}}{100\ \text{mL}}$
3) NaOH 1% ($^{b}/_{v}$) $= \frac{1\ \text{g}}{100\ \text{mL}}$

Lampiran 11. Perhitungan Pembuatan Larutan Analisis Kadar Flavonoid Total

1) Kuersetin 1.000 μg/mL $= \frac{50 \text{ mg}}{0{,}05 \text{ L}} = \frac{50.000 \text{ μg}}{50 \text{ mL}}$

Kuersetin 100 μg/mL = $V_1 \times C_1 = V_2 \times C_2$

$V_1 \times 1.000$ μg/mL = 50 mL x 100 μg/mL

$V_1 = \frac{50 \text{ mL} \times 100 \cancel{\text{μg/mL}}}{1.000 \cancel{\text{μg/mL}}}$

$V_1 = 5$ mL

Kuersetin 12,5 μg/mL

$V_1 \times C_1 = V_2 \times C_2$

$V_1 \times 100$ μg/mL = 10 mL x 12,5 μg/mL

$V_1 = \frac{10 \text{ mL} \times 12{,}5 \cancel{\text{μg/mL}}}{100 \cancel{\text{μg/mL}}}$

$V_1 = 1{,}25$ mL

Kuersetin 25 μg/mL

$V_1 \times C_1 = V_2 \times C_2$

$V_1 \times 100$ μg/mL = 10 mL x 25 μg/mL

$V_1 = \frac{10 \text{ mL} \times 25 \cancel{\text{μg/mL}}}{100 \cancel{\text{μg/mL}}}$

$V_1 = 2{,}5$ mL

Kuersetin 50 μg/mL

$V_1 \times C_1 = V_2 \times C_2$

$V_1 \times 100$ μg/mL = 10 mL x 50 μg/mL

$V_1 = \frac{10 \text{ mL} \times 50 \cancel{\text{μg/mL}}}{100 \cancel{\text{μg/mL}}}$

$V_1 = 5$ mL

Kuersetin 75 μg/mL

$V_1 \times C_1 = V_2 \times C_2$

$V_1 \times 100$ μg/mL = 10 mL x 75 μg/mL

$V_1 = \frac{10 \text{ mL} \times 75 \cancel{\text{μg/mL}}}{100 \cancel{\text{μg/mL}}}$

$V_1 = 7{,}5$ mL

Kuersetin 100 μg/mL

$V_1 \times C_1 = V_2 \times C_2$

$V_1 \times 100$ μg/mL = 10 mL x 100 μg/mL

$V_1 = \frac{10 \text{ mL} \times 100 \cancel{\text{μg/mL}}}{}$

$V_1 = 10$ mL

2) Natrium Asetat 1 M ($^b/_v$) $= \frac{\text{gr}}{\text{Mr}} \times \frac{1.000}{\text{V (mL)}}$

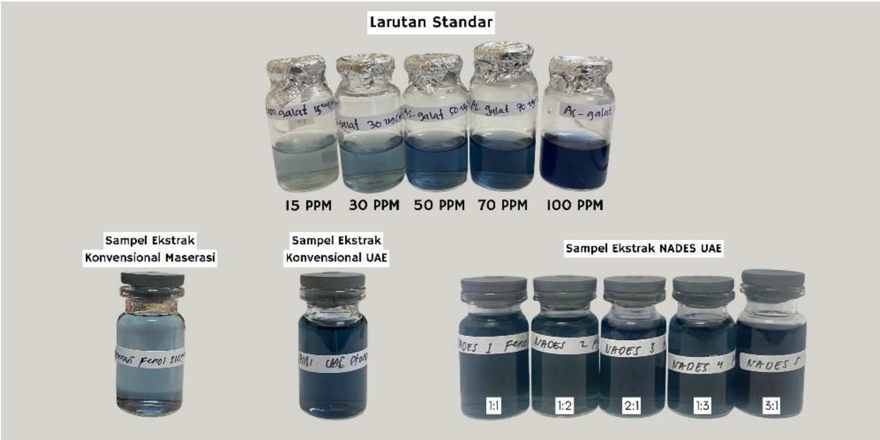
$1 \text{ M } (^b/_v) = \frac{\cancel{\text{gr}}}{136{,}08 \text{ g/mol}} \times \frac{1.000}{10 \text{ mL}}$

1.000 gr = 1.360,8

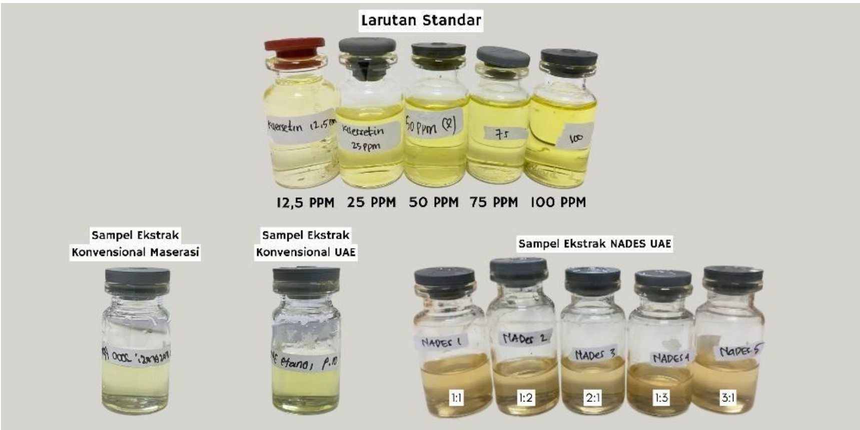
$\text{gr} = \frac{1.360{,}8}{1.000 \text{ L}} = 1{,}3608 \text{ g}$

3) Alumunium Klorida 10% ($^b/_v$) $= \frac{10 \text{ g}}{100 \text{ mL}} = \frac{1 \text{ g}}{10 \text{ mL}}$

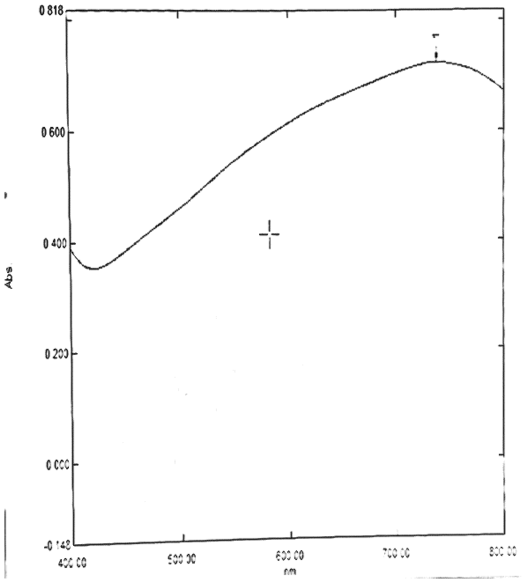
Lampiran 12. Pengujian Kadar Fenol Total



Lampiran 13. Pengujian Kadar Flavonoid Total

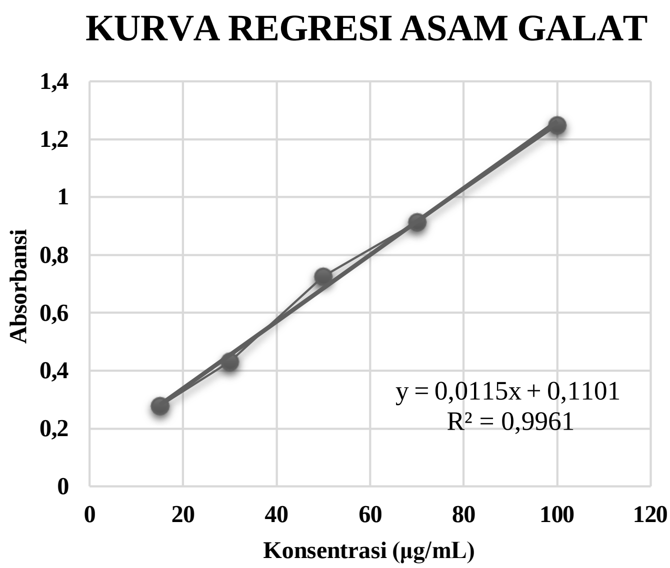


Lampiran 14. Spektrum Panjang Gelombang Maksimum Asam Galat 50 ppm



Lampiran 15. Kurva Regresi Asam Galat

Larutan Standar	Konsentrasi	Absorbansi
Asam Galat	15 ppm	0,279
	30 ppm	0,432
	50 ppm	0,726
	70 ppm	0,914
	100 ppm	1,25



Lampiran 16. Data Kadar Fenol Total

Ekstrak			Absorbansi	x (µg/mL)	X (mg/mL)	mg EAG/g simplisia	Rata-rata	SD	% RSD
KONVENSIONAL MASERASI		Replikasi 1	0,391	24,426	0,024426	17,424	17,445	0,2797	1,6039
		Replikasi 2	0,387	24,078	0,024078	17,176			
		Replikasi 3	0,396	24,861	0,024861	17,734			
KONVENSIONAL UAE		Replikasi 1	0,871	66,165	0,066165	66,165	66,252	0,0870	0,1313
		Replikasi 2	0,873	66,339	0,066339	66,339			
		Replikasi 3	0,872	66,252	0,066252	66,252			
NADES UAE	1 : 1	Replikasi 1	0,910	69,557	0,069557	69,557	69,933	0,3921	0,5607
		Replikasi 2	0,919	70,339	0,070339	70,339			
		Replikasi 3	0,914	69,904	0,069904	69,904			
	1 : 2	Replikasi 1	0,584	41,209	0,041209	41,209	41,354	0,3292	0,7961
		Replikasi 2	0,583	41,122	0,041122	41,122			
		Replikasi 3	0,590	41,730	0,041730	41,730			
	2 : 1	Replikasi 1	0,789	59,035	0,059035	59,035	59,238	0,2795	0,4719
		Replikasi 2	0,795	59,557	0,059557	59,557			
		Replikasi 3	0,790	59,122	0,059122	59,122			
	1 : 3	Replikasi 1	0,941	72,252	0,072252	72,252	72,774	0,5217	0,7169
		Replikasi 2	0,947	72,774	0,072774	72,774			
		Replikasi 3	0,953	73,296	0,073296	73,296			
	3 : 1	Replikasi 1	0,689	50,339	0,050339	50,339	51,180	0,8265	1,6148
		Replikasi 2	0,699	51,209	0,051209	51,209			
		Replikasi 3	0,708	51,991	0,051991	51,991			

- x (µg/mL)

  $y = 0{,}0115x + 0{,}1101$

  $x = \frac{y - 0{,}1101}{0{,}0115}$

1) Konvensional Maserasi

Replikasi 1

$x = \frac{0{,}391 - 0{,}1101}{0{,}0115} = \frac{0{,}2809}{0{,}0115} = 24{,}426\ (\mu g/mL)$

Replikasi 2

$x = \frac{0{,}387 - 0{,}1101}{0{,}0115} = \frac{0{,}2769}{0{,}0115} = 24{,}078\ (\mu g/mL)$

Replikasi 2

$x = \frac{0{,}396 - 0{,}1101}{0{,}0115} = \frac{0{,}2859}{0{,}0115} = 24{,}861\ (\mu g/mL)$

2) Konvensional UAE

Replikasi 1

$x = \frac{0{,}871 - 0{,}1101}{0{,}0115}$

Replikasi 2

$x = \frac{0{,}873 - 0{,}1101}{0{,}0115}$

Replikasi 3

$x = \frac{0{,}872 - 0{,}1101}{0{,}0115}$

$= \frac{0,7609}{0,0115}$ $= \frac{0,7629}{0,0115}$ $= \frac{0,7619}{0,0115}$

= 66,165 (µg/mL) = 66,339 (µg/mL) = 66,252 (µg/mL)

3) NADES UAE

a) 1 : 1

Replikasi 1	Replikasi 2	Replikasi 3
$x = \frac{0,910 - 0,1101}{0,0115}$	$x = \frac{0,919 - 0,1101}{0,0115}$	$x = \frac{0,914 - 0,1101}{0,0115}$
$= \frac{0,7999}{0,0115}$	$= \frac{0,8089}{0,0115}$	$= \frac{0,8039}{0,0115}$
= 69,557 (µg/mL)	= 70,339 (µg/mL)	= 69,904 (µg/mL)

b) 1 : 2

Replikasi 1	Replikasi 2	Replikasi 3
$x = \frac{0,584 - 0,1101}{0,0115}$	$x = \frac{0,583 - 0,1101}{0,0115}$	$x = \frac{0,590 - 0,1101}{0,0115}$
$= \frac{0,4739}{0,0115}$	$= \frac{0,4729}{0,0115}$	$= \frac{0,4799}{0,0115}$
= 41,209 (µg/mL)	= 41,122 (µg/mL)	= 41,730 (µg/mL)

c) 2 : 1

Replikasi 1	Replikasi 2	Replikasi 3
$x = \frac{0,789 - 0,1101}{0,0115}$	$x = \frac{0,795 - 0,1101}{0,0115}$	$x = \frac{0,790 - 0,1101}{0,0115}$
$= \frac{0,6789}{0,0115}$	$= \frac{0,6849}{0,0115}$	$= \frac{0,6799}{0,0115}$
= 59,035 (µg/mL)	= 59,557 (µg/mL)	= 59,122 (µg/mL)

d) 1 : 3

Replikasi 1	Replikasi 2	Replikasi 3
$x = \frac{0,941 - 0,1101}{0,0115}$	$x = \frac{0,947 - 0,1101}{0,0115}$	$x = \frac{0,953 - 0,1101}{0,0115}$
$= \frac{0,8309}{0,0115}$	$= \frac{0,8369}{0,0115}$	$= \frac{0,8429}{0,0115}$
= 72,252 (µg/mL)	= 72,774 (µg/mL)	= 73,296 (µg/mL)

e) 3 : 1

Replikasi 1	Replikasi 2	Replikasi 3
$x = \frac{0,689 - 0,1101}{0,0115}$	$x = \frac{0,699 - 0,1101}{0,0115}$	$x = \frac{0,708 - 0,1101}{0,0115}$
$= \frac{0,5789}{0,0115}$	$= \frac{0,5889}{0,0115}$	$= \frac{0,5979}{0,0115}$
= 50,339 (µg/mL)	= 51,209 (µg/mL)	= 51,991 (µg/mL)

- X (mg/mL)

Sampel Uji	x (µg/mL)	X (mg/mL)
Konvensional Maserasi Replikasi 1	24,426 (µg/mL)	X (mg/mL) $= \frac{x\ (\mu g/mL)}{1.000}$ $= \frac{24{,}426}{1.000}$ $= 0{,}024426$

- mg EAG/g simplisia

Konvensional Maserasi Replikasi 1

$$= \frac{c \times V \times Fp}{m} = \frac{0{,}024426 \times 25 \times 20}{0{,}15} = 81{,}420 \text{ mg EAG/g ekstrak}$$

$$= \frac{81{,}420 \times 1{,}07}{5} = 17{,}424 \text{ mg EAG/g simplisia}$$

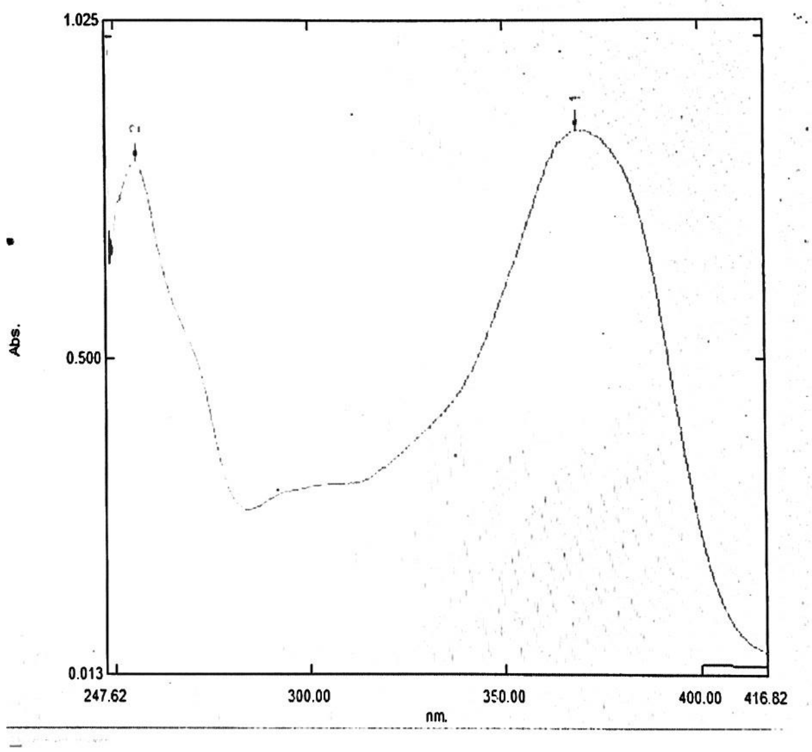
Konvensional UAE Replikasi 1

$$= \frac{c \times V \times Fp}{m} = \frac{0{,}066165 \times 40 \times 50}{2} = 66{,}165 \text{ mg EAG/g simplisia}$$

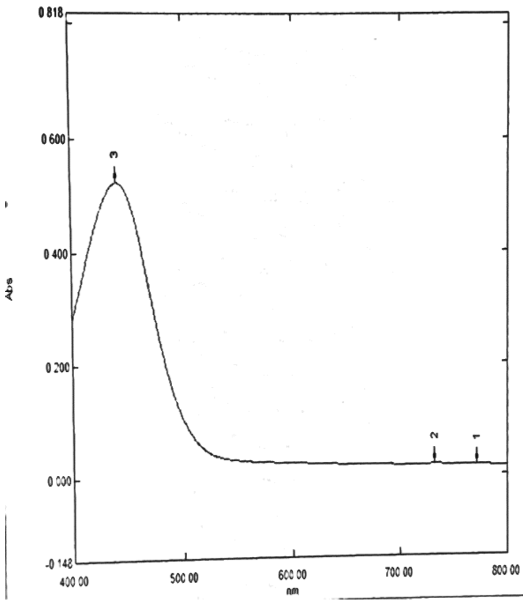
NADES UAE 1 : 1 Replikasi 1

$$= \frac{c \times V \times Fp}{m} = \frac{0{,}069557 \times 40 \times 50}{2} = 69{,}557 \text{ mg EAG/g simplisia}$$

Lampiran 17. Spektrum Panjang Gelombang Maksimum Kuersetin

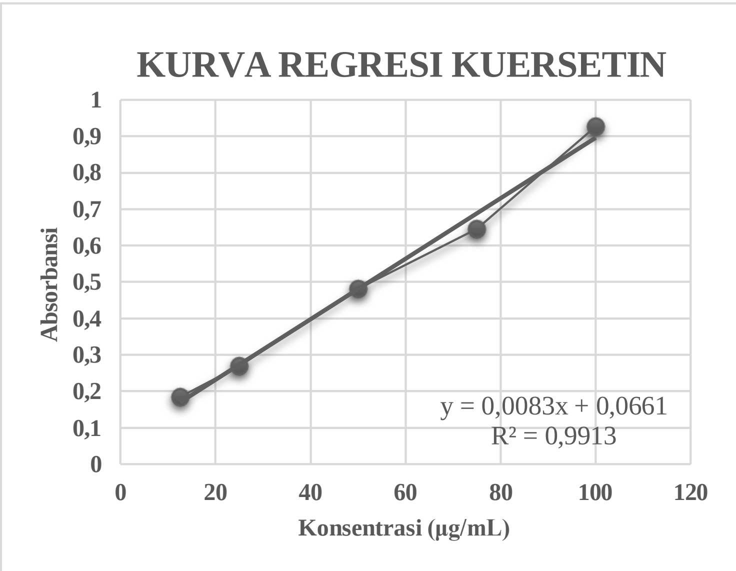


Lampiran 18. Spektrum Panjang Gelombang Maksimum Kuersetin 50 ppm



Lampiran 19. Kurva Regresi Kuersetin

Larutan Standar	Konsentrasi	Absorbansi
Kuersetin	12,5 PPM	0,185
	25 PPM	0,270
	50 PPM	0,481
	75 PPM	0,645
	100 PPM	0,927



Lampiran 20. Data Kadar Flavonoid Total

Ekstrak			Absorbansi	x (µg/mL)	X (mg/mL)	mg EK/g simplisia	Rata-rata	SD	% RSD
KONVENSIONAL MASERASI		Replikasi 1	0,204	16,614	0,016614	1,778	1,808	0,0414	2,2923
		Replikasi 2	0,205	16,735	0,016735	1,791			
		Replikasi 3	0,210	17,337	0,017337	1,855			
KONVENSIONAL UAE		Replikasi 1	0,285	26,373	0,026373	2,637	2,593	0,0423	1,6317
		Replikasi 2	0,278	25,530	0,025530	2,553			
		Replikasi 3	0,281	25,892	0,025892	2,589			
NADES UAE	1 : 1	Replikasi 1	0,345	33,602	0,033602	3,360	3,312	0,0417	1,2601
		Replikasi 2	0,339	32,880	0,032880	3,288			
		Replikasi 3	0,339	32,880	0,032880	3,288			
	1 : 2	Replikasi 1	0,289	26,855	0,026855	2,686	2,633	0,1010	3,8370
		Replikasi 2	0,290	26,976	0,026976	2,698			
		Replikasi 3	0,275	25,169	0,025169	2,517			
	2 : 1	Replikasi 1	0,263	23,723	0,023723	2,372	2,344	0,0251	1,0699
		Replikasi 2	0,260	23,361	0,023361	2,336			
		Replikasi 3	0,259	23,241	0,023241	2,324			
	1 : 3	Replikasi 1	0,443	45,410	0,045410	4,541	4,441	0,0872	1,9628
		Replikasi 2	0,431	43,964	0,043964	4,396			
		Replikasi 3	0,430	43,843	0,043843	4,384			
	3 : 1	Replikasi 1	0,268	24,325	0,024325	2,433	2,348	0,0790	3,3645
		Replikasi 2	0,260	23,361	0,023361	2,336			
		Replikasi 3	0,255	22,759	0,022759	2,276			

- x (µg/mL)

  $y = 0{,}0083x + 0{,}0661$

  $x = \frac{y - 0{,}0661}{0{,}0083}$

1) Konvensional Maserasi

Replikasi 1

$x = \frac{0{,}204 - 0{,}0661}{0{,}0083} = \frac{0{,}1379}{0{,}0083} = 16{,}614$ (µg/mL)

Replikasi 2

$x = \frac{0{,}205 - 0{,}0661}{0{,}0083} = \frac{0{,}1389}{0{,}0083} = 16{,}735$ (µg/mL)

Replikasi 3

$x = \frac{0{,}210 - 0{,}0661}{0{,}0083} = \frac{0{,}1439}{0{,}0083} = 17{,}337$ (µg/mL)

2) Konvensional UAE

Replikasi 1 Replikasi 2 Replikasi 3

$x = \frac{0,285 - 0,0661}{0,0083}$ $= \frac{0,2189}{0,0083}$ = 26,373 (µg/mL)

$x = \frac{0,278 - 0,0661}{0,0083}$ $= \frac{0,2119}{0,0083}$ = 25,530 (µg/mL)

$x = \frac{0,281 - 0,0661}{0,0083}$ $= \frac{0,2149}{0,0083}$ = 25,892 (µg/mL)

3) NADES UAE

a) 1 : 1

Replikasi 1	Replikasi 2	Replikasi 3
$x = \frac{0,345 - 0,0661}{0,0083}$	$x = \frac{0,339 - 0,0661}{0,0083}$	$x = \frac{0,339 - 0,0661}{0,0083}$
$= \frac{0,2789}{0,0083}$	$= \frac{0,2729}{0,0083}$	$= \frac{0,2729}{0,0083}$
= 33,602 (µg/mL)	= 32,880 (µg/mL)	= 32,880 (µg/mL)

b) 1 : 2

Replikasi 1	Replikasi 2	Replikasi 3
$x = \frac{0,289 - 0,0661}{0,0083}$	$x = \frac{0,290 - 0,0661}{0,0083}$	$x = \frac{0,275 - 0,0661}{0,0083}$
$= \frac{0,2229}{0,0083}$	$= \frac{0,2239}{0,0083}$	$= \frac{0,2089}{0,0083}$
= 26,855 (µg/mL)	= 26,976 (µg/mL)	= 25,169 (µg/mL)

c) 2 : 1

Replikasi 1	Replikasi 2	Replikasi 3
$x = \frac{0,263 - 0,0661}{0,0083}$	$x = \frac{0,260 - 0,0661}{0,0083}$	$x = \frac{0,259 - 0,0661}{0,0083}$
$= \frac{0,1969}{0,0083}$	$= \frac{0,1939}{0,0083}$	$= \frac{0,1929}{0,0083}$
= 23,723 (µg/mL)	= 23,361 (µg/mL)	= 23,241 (µg/mL)

d) 1 : 3

Replikasi 1	Replikasi 2	Replikasi 3
$x = \frac{0,443 - 0,0661}{0,0083}$	$x = \frac{0,431 - 0,0661}{0,0083}$	$x = \frac{0,430 - 0,0661}{0,0083}$
$= \frac{0,3769}{0,0083}$	$= \frac{0,3649}{0,0083}$	$= \frac{0,3639}{0,0083}$
= 45,410 (µg/mL)	= 43,964 (µg/mL)	= 43,843 (µg/mL)

e) 3 : 1

Replikasi 1	Replikasi 2	Replikasi 3
$x = \frac{0,268 - 0,0661}{0,0083}$	$x = \frac{0,260 - 0,0661}{0,0083}$	$x = \frac{0,255 - 0,0661}{0,0083}$
$= \frac{0,2019}{0,0083}$	$= \frac{0,1939}{0,0083}$	$= \frac{0,1889}{0,0083}$
= 24,325 (µg/mL)	= 23,361 (µg/mL)	= 22,759 (µg/mL)

- X (mg/mL)

Sampel Uji	x (µg/mL)	X (mg/mL)
Konvensional Maserasi Replikasi 1	16,614 (µg/mL)	X (mg/mL) $= \frac{x\ (\mu g/mL)}{1.000}$ $= \frac{16,614}{1.000}$ $= 0,016614$

- mg EK/g simplisia

Konvensional Maserasi Replikasi 1

$$= \frac{c \times V \times Fp}{m} = \frac{0,016614 \times 25 \times 4}{0,2} = 8,307 \text{ mg EK/g ekstrak}$$

$$= \frac{8,307 \times 1,07}{5} = 1,778 \text{ mg EK/g simplisia}$$

Konvensional UAE Replikasi 1

$$= \frac{c \times V \times Fp}{m} = \frac{0,026373 \times 40 \times 5}{2} = 2,637 \text{ mg EK/g simplisia}$$

NADES UAE 1 : 1 Replikasi 1

$$= \frac{c \times V \times Fp}{m} = \frac{0,033602 \times 40 \times 5}{2} = 3,360 \text{ mg EK/g simplisia}$$

Lampiran 21. Pembuatan Larutan Uji Daya Hambat Aktivitas Antijamur Ekstrak Konvensional Maserasi *Pometia pinnata*

- PPM = $\frac{mg}{L}$
- Konsentrasi yang digunakan pada pengujian daya hambat adalah 60.000 µg ekstrak kental/mL.

  PPM = $\frac{60.000\ mg}{1\ L} = \frac{60.000\ mg}{1.000\ mL} = \frac{60\ mg}{1\ mL} \rightarrow \frac{120\ mg}{2\ mL}$

  Maka, ditimbang 60 mg ekstrak kental dan dilarutkan dalam 2 mL DMSO 10% lalu homogenkan menggunakan *vortex mixer*.

Konversi konsentrasi ekstrak kental menjadi konsentrasi ekstrak cair:

- 60.000 µg/mL = $\frac{60.000\ \mu g}{1\ mL} = \frac{0{,}06\ g\ (\text{ekstrak kental})}{1\ mL\ \text{pelarut}}$
- Hasil ekstraksi maserasi 5 g simplisia menghasilkan 1 g ekstrak kental

  $\frac{5}{1} = \frac{x}{0{,}06} = \frac{5 \times 0{,}06}{1} = 0{,}3$ g simplisia

  Maka dalam 0,06 g ekstrak kental terdapat 0,3 g simplisia/ 1 mL pelarut

- Jika terdapat 0,3 g simplisia dalam 1 ml pelarut, maka:

  PPM = $\frac{mg}{L}$

  PPM = $\frac{300\ mg}{1\ L} = \frac{300.000\ \mu g}{1\ mL}$ = 300.000 µg simplisia/mL

Konversi menjadi konsentrasi µg/disk

- Ekstrak konvensional maserasi

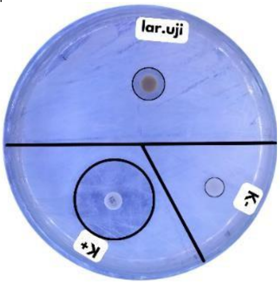
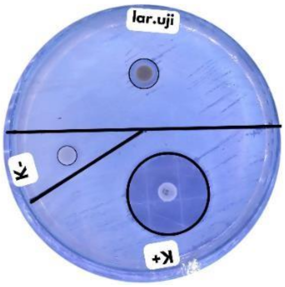
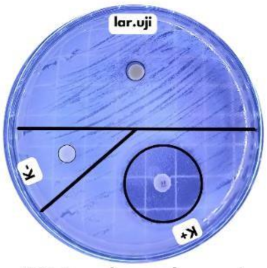
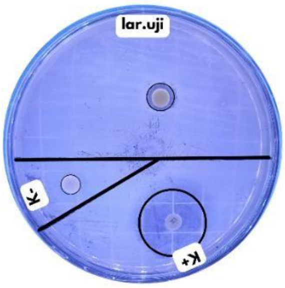
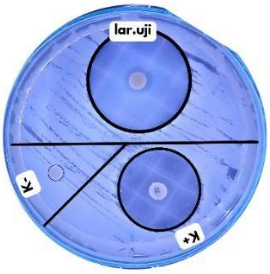
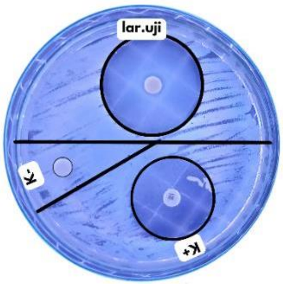
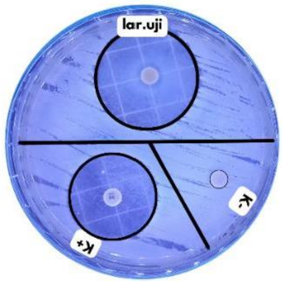
  $\frac{300.000\ \mu g}{1.000\ \mu L} \times 20\ \mu L = 6.000\ \mu g/disk$

- Ekstrak konvensional UAE dan NADES UAE

  $\frac{50.000\ \mu g}{1.000\ \mu L} \times 20\ \mu L = 1.000\ \mu g/disk$

  Maka sebanyak 20 µL larutan uji direndam dengan kertas cakram

Lampiran 22. Diameter Zona Hambat Ekstrak *Pometia pinnata* terhadap *Malassezia furfur*

Kelompok Perlakuan	**Replikasi**		
	I	**II**	**III**
Ekstrak Konvensional Maserasi			
Ekstrak Konvensional UAE			
Ekstrak NADES UAE			
Kontrol Negatif Pelarut NADES			

Lampiran 23. Data Nilai dan Perhitungan Diameter Zona Hambat Ekstrak *Pometia pinnata* terhadap *Malassezia furfur*

Kelompok Perlakuan	Replikasi			Rata-rata (mm)	SD	%RSD	Respon Hambatan
	I (mm)	II (mm)	III (mm)				
Ekstrak Konvensional Maserasi	3,85	4,1	3,4	3,78	0,355	9,376122	Lemah
Kontrol (+) (Ketoconazole 30 mcg)	20	19,85	19,8	19,88	0,104	0,52347	Kuat
Kontrol (-) (DMSO 10%)	0	0	0	0	0	0	Tidak ada

Perhitungan :

Larutan Uji

Replikasi I

$$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2} = \frac{(10{,}2\text{-}6) + (9{,}7\text{-}6)}{2} = 3{,}85 \text{ mm}$$

Replikasi II

$$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2} = \frac{(10{,}1\text{-}6) + (10{,}1\text{-}6)}{2} = 4{,}1 \text{ mm}$$

Replikasi III

$$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2} = \frac{(9{,}4\text{-}6) + (9{,}4\text{-}6)}{2} = 3{,}4 \text{ mm}$$

Kontrol Positif

Replikasi I

$$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2} = \frac{(28{,}2\text{-}6) + (24\text{-}6)}{2} = 20 \text{ mm}$$

Replikasi II

$$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2} = \frac{(25{,}3\text{-}6) + (26{,}4\text{-}6)}{2} = 19{,}85 \text{ mm}$$

Replikasi III

$$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2} = \frac{(27{,}4\text{-}6) + (24{,}2\text{-}6)}{2} = 19{,}8 \text{ mm}$$

Kelompok Perlakuan	Replikasi			Rata-rata (mm)	SD	%RSD	Respon Hambatan
	I (mm)	II (mm)	III (mm)				
Ekstrak Konvensional UAE	1,2	0,6	2,65	1,48	1,054	71,05354	Lemah
Kontrol (+) (Ketoconazole 30 mcg)	22,5	22,75	17,4	20,88	3,019	14,45767	Kuat

Kontrol (-) (Etanol 96%)	0	0	0	0	0	0	Tidak ada

Perhitungan :

	Replikasi I	Replikasi II	Replikasi III
Larutan Uji	$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2}$ $= \frac{(6{,}8\text{-}6) + (7{,}6\text{-}6)}{2}$ $= 1{,}2$ mm	$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2}$ $= \frac{(6{,}4\text{-}6) + 6{,}8\text{-}6)}{2}$ $= 0{,}6$ mm	$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2}$ $= \frac{(9{,}7\text{-}6) + (7{,}6\text{-}6)}{2}$ $= 2{,}65$ mm
Kontrol Positif	$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2}$ $= \frac{(29{,}5\text{-}6) + (27{,}5\text{-}6)}{2}$ $= 22{,}5$ mm	$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2}$ $= \frac{(29{,}5\text{-}6) + (28\text{-}6)}{2}$ $= 22{,}75$ mm	$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2}$ $= \frac{(25\text{-}6) + (21{,}8\text{-}6)}{2}$ $= 17{,}4$ mm

Kelompok Perlakuan	Replikasi			Rata-rata (mm)	SD	%RSD	Respon Hambatan
	I (mm)	II (mm)	III (mm)				
Ekstrak NADES UAE	4	2,6	3,5	3,37	0,709	21,0522	Lemah
Kontrol (+) (Ketoconazole 30 mcg)	22,9	22,95	23,8	23,22	0,506	2,178606	Kuat
Kontrol (-) (NADES 1:3)	25,9	25,35	25,2	25,48	0,369	1,446262	Kuat

Perhitungan :

	Replikasi I	Replikasi II	Replikasi III
Larutan Uji	$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2}$ $= \frac{(36{,}6\text{-}6) + (35{,}2\text{-}6)}{2}$ $= 29{,}9 – 25{,}9$ $= 4$ mm	$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2}$ $= \frac{(34{,}5\text{-}6) + 33{,}4\text{-}6)}{2}$ $= 27{,}95 - 25{,}35$ $= 2{,}6$ mm	$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2}$ $= \frac{(35{,}5\text{-}6) + (33{,}9\text{-}6)}{2}$ $= 28{,}7 - 25{,}2$ $= 3{,}5$ mm

	Replikasi I	Replikasi II	Replikasi III
Kontrol Positif	$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2}$ $= \frac{(29{,}6\text{-}6) + (28{,}8\text{-}6)}{2}$ $= 22{,}9$ mm	$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2}$ $= \frac{(28{,}5\text{-}6) + (29{,}4\text{-}6)}{2}$ $= 22{,}95$ mm	$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2}$ $= \frac{(29{,}4\text{-}6) + (30{,}2\text{-}6)}{2}$ $= 23{,}8$ mm
Kontrol Negatif	$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2}$ $= \frac{(31{,}8\text{-}6) + (32{,}0\text{-}6)}{2}$ $= 25{,}9$ mm	$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2}$ $= \frac{(31{,}5\text{-}6) + (31{,}2\text{-}6)}{2}$ $= 25{,}35$ mm	$R = \frac{(Dv\text{-}Dc) + (Dh\text{-}Dc)}{2}$ $= \frac{(31{,}3\text{-}6) + (31{,}1\text{-}6)}{2}$ $= 25{,}2$ mm

Lampiran 24. Hasil Penetapan Nilai KHM Ekstrak NADES UAE *Pometia pinnata* terhadap *Malassezia furfur*

Larutan Uji	Pengenceran Ekstrak	Konsentrasi Ekstrak	Hasil	Gambar
Ekstrak NADES UAE	60 x	833 ppm	Keruh	
	45 x	1.111 ppm	Keruh	
	35 x	1.429 ppm	Keruh	
	15 x	3.333 ppm	Sedikit Keruh	
	14 x	3.571 ppm	Jernih	
	13 x	3.846 ppm	Jernih	

Lampiran 25. *One Way* ANOVA *test*

Kadar Fenol Total

Tujuan	:	Mengetahui ada tidaknya perbedaan kadar fenol total yang signifikan antara ekstrak konvensional maserasi, konvensional UAE dan NADES UAE daun matoa.
Hipotesis	:	Ho: Tidak terdapat perbedaan kadar fenol total antara ekstrak konvensional maserasi, konvensional UAE dan NADES UAE (1:3) daun matoa. Ha: Terdapat perbedaan kadar fenol total antara ekstrak konvensional maserasi, konvensional UAE dan NADES UAE (1:3) daun matoa.
α	:	0,05
Kriteria	:	Ho ditolak jika nilai signifikan < α
Hasil	:	Nilai signifikan < α
Kesimpulan	:	Ho ditolak dan Ha diterima, terdapat perbedaan kadar fenol total yang signifikan antara ekstrak konvensional maserasi, konvensional UAE dan NADES UAE (1:3) daun matoa.

Uji Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Ekstrak	Statistic	df	Sig.	Statistic	df	Sig.
KFT	Konvensional Maserasi	.196	3	.	.996	3	.878
	Konvensional UAE	.175	3	.	1.000	3	1.000
	NADES UAE	.175	3	.	1.000	3	1.000

Uji Homogenitas

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
KFT	Based on Mean	1.638	2	6	.271
	Based on Median	1.581	2	6	.281
	Based on Median and with adjusted df	1.581	2	3.221	.332
	Based on trimmed mean	1.635	2	6	.271

ANOVA

ANOVA

KFT

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5486027398.222	2	2743013699.111	22972.395	<,001
Within Groups	716428.667	6	119404.778		
Total	5486743826.889	8			

Uji Post Hoc

Multiple Comparisons

Dependent Variable: daya hambat
Bonferroni

(I) Ekstrak	(J) Ekstrak	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
Konvensional Maserasi	Konvensional UAE	-48807.333*	282.140	<.001	-49734.86	-47879.81
	NADES UAE	-55329.333*	282.140	<.001	-56256.86	-54401.81
konvensional UAE	Konvensional Maserasi	48807.333*	282.140	<.001	47879.81	49734.86
	NADES UAE	-6522.000*	282.140	<.001	-7449.52	-5594.48
NADES UAE	Konvensional Maserasi	55329.333*	282.140	<.001	54401.81	56256.86
	Konvensional UAE	6522.000*	282.140	<.001	5594.48	7449.52

*. The mean difference is significant at the 0.05 level.

Kadar Fenol Total

Tujuan	:	Mengetahui ada tidaknya perbedaan kadar fenol total yang signifikan antara ekstrak NADES UAE perbandingan 1:1, 1:2, 2:1, 1:3 dan 3:1 daun matoa.
Hipotesis	:	Ho: Tidak terdapat perbedaan kadar fenol total antara ekstrak NADES UAE perbandingan 1:1, 1:2, 2:1, 1:3 dam 3:1 daun matoa. Ha: Terdapat perbedaan kadar fenol total antara ekstrak NADES UAE perbandingan 1:1, 1:2, 2:1, 1:3 dam 3:1 daun matoa.
α	:	0,05
Kriteria	:	Ho ditolak jika nilai signifikan < α
Hasil	:	Nilai signifikan < α
Kesimpulan	:	Ho ditolak dan Ha diterima, terdapat perbedaan kadar fenol total yang signifikan antara ekstrak NADES UAE perbandingan 1:1, 1:2, 2:1, 1:3 dam 3:1 daun matoa.

Uji Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	ekstrak	Statistic	df	Sig.	Statistic	df	Sig.
KFT	1:1	,197	3	.	,996	3	,876
	1:2	,337	3	.	,855	3	,253
	2:1	,328	3	.	,871	3	,298
	1:3	,175	3	.	1,000	3	1,000
	3:1	,181	3	.	,999	3	,941

Uji Homogenitas

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
KFT	Based on Mean	,779	4	10	,563
	Based on Median	,683	4	10	,620
	Based on Median and with adjusted df	,683	4	7,003	,626
	Based on trimmed mean	,776	4	10	,565

ANOVA

ANOVA

KFT

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2045,442	4	511,360	1973,973	<,001
Within Groups	2,591	10	,259		
Total	2048,032	14			

Uji Post Hoc

Multiple Comparisons

Dependent Variable: KFT

Bonferroni

(I) ekstrak	(J) ekstrak	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
1:1	1:2	28,57967*	,41557	<,001	27,0913	30,0680
	2:1	10,69533*	,41557	<,001	9,2070	12,1837
	1:3	-2,84067*	,41557	<,001	-4,3290	-1,3523
	3:1	18,75367*	,41557	<,001	17,2653	20,2420
1:2	1:1	-28,57967*	,41557	<,001	-30,0680	-27,0913
	2:1	-17,88433*	,41557	<,001	-19,3727	-16,3960
	1:3	-31,42033*	,41557	<,001	-32,9087	-29,9320
	3:1	-9,82600*	,41557	<,001	-11,3143	-8,3377
2:1	1:1	-10,69533*	,41557	<,001	-12,1837	-9,2070
	1:2	17,88433*	,41557	<,001	16,3960	19,3727
	1:3	-13,53600*	,41557	<,001	-15,0243	-12,0477
	3:1	8,05833*	,41557	<,001	6,5700	9,5467
1:3	1:1	2,84067*	,41557	<,001	1,3523	4,3290
	1:2	31,42033*	,41557	<,001	29,9320	32,9087
	2:1	13,53600*	,41557	<,001	12,0477	15,0243
	3:1	21,59433*	,41557	<,001	20,1060	23,0827
3:1	1:1	-18,75367*	,41557	<,001	-20,2420	-17,2653
	1:2	9,82600*	,41557	<,001	8,3377	11,3143
	2:1	-8,05833*	,41557	<,001	-9,5467	-6,5700
	1:3	-21,59433*	,41557	<,001	-23,0827	-20,1060

*. The mean difference is significant at the 0.05 level.

Kadar Flavonoid Total

Tujuan	:	Mengetahui ada tidaknya perbedaan kadar flavonoid total yang signifikan antara ekstrak konvensional maserasi, konvensional UAE dan NADES UAE daun matoa.
Hipotesis	:	Ho: Tidak terdapat perbedaan kadar flavonoid total antara ekstrak konvensional maserasi, konvensional UAE dan NADES UAE daun matoa.
		Ha: Terdapat perbedaan kadar flavonoid total antara ekstrak konvensional maserasi, konvensional UAE dan NADES UAE daun matoa.
α	:	0,05
Kriteria	:	Ho ditolak jika nilai signifikan < α
Hasil	:	Nilai signifikan < α
Kesimpulan	:	Ho ditolak dan Ha diterima, terdapat perbedaan kadar flavonoid total yang signifikan antara ekstrak konvensional maserasi, konvensional UAE dan NADES UAE daun matoa.

Uji Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Ekstrak	Statistic	df	Sig.	Statistic	df	Sig.
KFLT	Konvensional Maserasi	.327	3	.	.872	3	.302
	Konvensional UAE	.204	3	.	.993	3	.843
	NADES UAE	.361	3	.	.807	3	.131

Uji Homogenitas

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
KFLT	Based on Mean	2.554	2	6	.158
	Based on Median	.238	2	6	.795
	Based on Median and with adjusted df	.238	2	3.115	.801
	Based on trimmed mean	2.179	2	6	.194

ANOVA

ANOVA

KFLT

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	10958044.222	2	5479022.111	1479.306	<,001
Within Groups	22222.667	6	3703.778		
Total	10980266.889	8			

Uji Post Hoc

Multiple Comparisons

Dependent Variable: daya hambat
Bonferroni

(I) Ekstrak	(J) Ekstrak	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
Konvensional Maserasi	Konvensional UAE	-785.000*	49.691	<.001	-948.36	-621.64
	NADES UAE	-2632.333*	49.691	<.001	-2795.69	-2468.98
Konvensional UAE	Konvensional Maserasi	785.000*	49.691	<.001	621.64	948.36
	NADES UAE	-1847.333*	49.691	<.001	-2010.69	-1683.98
NADES UAE	Konvensional Maserasi	2632.333*	49.691	<.001	2468.98	2795.69
	Konvensional UAE	1847.333*	49.691	<.001	1683.98	2010.69

*. The mean difference is significant at the 0.05 level.

Kadar Flavonoid Total

Tujuan	:	Mengetahui ada tidaknya perbedaan kadar flavonoid total yang signifikan antara ekstrak NADES UAE perbandingan 1:1, 1:2, 2:1, 1:3 dan 3:1 daun matoa.
Hipotesis	:	Ho: Tidak terdapat perbedaan kadar flavonoid total antara ekstrak NADES UAE perbandingan 1:1, 1:2, 2:1, 1:3 dam 3:1 daun matoa. Ha: Terdapat perbedaan kadar flavonoid total antara ekstrak NADES UAE perbandingan 1:1, 1:2, 2:1, 1:3 dam 3:1 daun matoa.
α	:	0,05
Kriteria	:	Ho ditolak jika nilai signifikan < α
Hasil	:	Nilai signifikan < α
Kesimpulan	:	Ho ditolak dan Ha diterima, terdapat perbedaan kadar flavonoid total yang signifikan antara ekstrak NADES UAE perbandingan 1:1, 1:2, 2:1, 1:3 dam 3:1 daun matoa.

Uji Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	ekstrak	Statistic	df	Sig.	Statistic	df	Sig.
KFT	1:1	,353	3	.	,824	3	,174
	1:2	,364	3	.	,799	3	,113
	2:1	,292	3	.	,923	3	,463
	1:3	,361	3	.	,807	3	,131
	3:1	,229	3	.	,982	3	,742

Uji Homogenitas

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
KFT	Based on Mean	2,270	4	10	,134
	Based on Median	,278	4	10	,885
	Based on Median and with adjusted df	,278	4	5,978	,882
	Based on trimmed mean	1,960	4	10	,177

ANOVA

ANOVA

KFT

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	9,475	4	2,369	443,212	<,001
Within Groups	,053	10	,005		
Total	9,528	14			

Uji Post Hoc

Multiple Comparisons

Dependent Variable: KFT
Bonferroni

(I) ekstrak	(J) ekstrak	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
1:1	1:2	,67567*	,05969	<,001	,4619	,8894
	2:1	,96533*	,05969	<,001	,7516	1,1791
	1:3	-1,13100*	,05969	<,001	-1,3448	-,9172
	3:1	,96100*	,05969	<,001	,7472	1,1748
1:2	1:1	-,67567*	,05969	<,001	-,8894	-,4619
	2:1	,28967*	,05969	,007	,0759	,5034
	1:3	-1,80667*	,05969	<,001	-2,0204	-1,5929
	3:1	,28533*	,05969	,007	,0716	,4991
2:1	1:1	-,96533*	,05969	<,001	-1,1791	-,7516
	1:2	-,28967*	,05969	,007	-,5034	-,0759
	1:3	-2,09633*	,05969	<,001	-2,3101	-1,8826
	3:1	-,00433	,05969	1,000	-,2181	,2094
1:3	1:1	1,13100*	,05969	<,001	,9172	1,3448
	1:2	1,80667*	,05969	<,001	1,5929	2,0204
	2:1	2,09633*	,05969	<,001	1,8826	2,3101
	3:1	2,09200*	,05969	<,001	1,8782	2,3058
3:1	1:1	-,96100*	,05969	<,001	-1,1748	-,7472
	1:2	-,28533*	,05969	,007	-,4991	-,0716
	2:1	,00433	,05969	1,000	-,2094	,2181
	1:3	-2,09200*	,05969	<,001	-2,3058	-1,8782

*. The mean difference is significant at the 0.05 level.

Aktivitas Antijamur

Tujuan	:	Mengetahui ada tidaknya perbedaan daya hambat yang signifikan antara ekstrak daun matoa dan kontrol positif.
Hipotesis	:	Ho: Tidak terdapat perbedaan daya hambat antara ekstrak daun matoa dan kontrol positif.
		Ha: Terdapat perbedaan daya hambat antara ekstrak daun matoa dan kontrol positif.
α	:	0,05
Kriteria	:	Ho ditolak jika nilai signifikan < α
Hasil	:	Nilai signifikan > α
Kesimpulan	:	Ho diterima dan Ha ditolak, terdapat perbedaan daya hambat yang signifikan antara ekstrak daun matoa dan kontrol positif.

Ekstrak Konvensional Maserasi

Uji Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	ekstrak	Statistic	df	Sig.	Statistic	df	Sig.
dayahambat	ekstrak	,241	3	.	,974	3	,688
	kontrol (+)	,292	3	.	,923	3	,463

Uji Homogenitas

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
dayahambat	Based on Mean	3,200	1	4	,148
	Based on Median	1,471	1	4	,292
	Based on Median and with adjusted df	1,471	1	2,453	,329
	Based on trimmed mean	3,063	1	4	,155

ANOVA

ANOVA

dayahambat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	388,815	1	388,815	5689,976	<,001
Within Groups	,273	4	,068		
Total	389,088	5			

Ekstrak Konvensional UAE

Uji Normalitas

Tests of Normality

	ekstrak	Kolmogorov-Smirnov[a] Statistic	df	Sig.	Shapiro-Wilk Statistic	df	Sig.
dayahambat	ekstrak	,273	3	.	,946	3	,551
	kontrol (+)	,370	3	.	,785	3	,079

Uji Homogenitas

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
dayahambat	Based on Mean	5,817	1	4	,073
	Based on Median	,413	1	4	,556
	Based on Median and with adjusted df	,413	1	2,256	,580
	Based on trimmed mean	4,739	1	4	,095

ANOVA

ANOVA

dayahambat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	564,540	1	564,540	110,405	<,001
Within Groups	20,453	4	5,113		
Total	584,993	5			

Ekstrak NADES UAE (1:3)

Uji Normalitas

Tests of Normality

	ekstrak	Kolmogorov-Smirnov[a] Statistic	df	Sig.	Shapiro-Wilk Statistic	df	Sig.
dayahambat	ekstrak	,241	3	.	,974	3	,688
	kontrol (+)	,368	3	.	,792	3	,094

Uji Homogenitas

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
dayahambat	Based on Mean	,319	1	4	,602
	Based on Median	,193	1	4	,683
	Based on Median and with adjusted df	,193	1	3,987	,683
	Based on trimmed mean	,310	1	4	,607

ANOVA

ANOVA

dayahambat

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	591,034	1	591,034	1557,059	<,001
Within Groups	1,518	4	,380		
Total	592,552	5			

Ekstrak Cair Konvensional UAE dan NADES UAE Konsentrasi 1.000 mcg/disk

Tujuan	:	Mengetahui ada tidaknya perbedaan daya hambat yang signifikan antara ekstrak konvensional UAE dan NADES UAE daun matoa.
Hipotesis	:	Ho: Tidak terdapat perbedaan daya hambat antara ekstrak konvensional UAE dan NADES UAE daun matoa. Ha: Terdapat perbedaan daya hambat antara ekstrak konvensional UAE dan NADES UAE daun matoa.
α	:	0,05
Kriteria	:	Ho ditolak jika nilai signifikan < α
Hasil	:	Nilai signifikan > α
Kesimpulan	:	Ho diterima dan Ha ditolak, tidak terdapat perbedaan daya hambat yang signifikan antara ekstrak konvensional UAE dan NADES UAE daun matoa.

Uji Normalitas

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Ekstrak	Statistic	df	Sig.	Statistic	df	Sig.
Aktivitas Antijamur	Konvensional UAE	,273	3	.	,946	3	,551
	NADES UAE	,241	3	.	,974	3	,688

a. Lilliefors Significance Correction

Uji Homogenitas

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Aktivitas Antijamur	Based on Mean	,677	1	4	,457
	Based on Median	,192	1	4	,684
	Based on Median and with adjusted df	,192	1	3,336	,688
	Based on trimmed mean	,631	1	4	,472

ANOVA

ANOVA

Aktivitas Antijamur

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5,320	1	5,320	6,592	,062
Within Groups	3,228	4	,807		
Total	8,549	5			